```
                                 (((((((..((((.........)))).(((((.......)))))).....(((((.....
chr-5.trna174-Glu-CTC    GCCUGUUAUACCUCAGUCGGUACAG--CGCAAGGCUCUCAACCCUUGUGGUUGUGGGUUCGA 58
chr-3.trna92-Glu-CTC     ----GUUAGCUUAGUUGGUAGAG--CACAAGGCUCUCAACCUUUGUGGUUGUGGGUUCGA 54
chr-1.trna58-Glu-TTC     GUCCCUUUCAUCUAG-UGGUU-AGGACAUCGUCUUUUCAUGUCGAAGA-CACGGGUUCAA 57
chr-9.trna20-Glu-TTC     GUCCCUUUCGUCUAG-UGGUU-AGGACAUCGUCUUUUCAUGUCGAAGA-CACGGGUUCGA 57
chr-9.trna135-Glu-TTC    GUCCCUUUCGUCCAG-UGGUU-AGGACAUCGUCUUUUCAUGUCGAAGA-CACGGGUUCGA 57
chr-3.trna33-Glu-TTC     GUCCCUUUCGUCCAG-UGGUU-AGGACAUCGUCUUUUCAUGUCGAAGA-CACGGGUUCGA 57
chr-5.trna106-Glu-TTC    GCCCCCAUCGUCUAG-UGGUUCAGGACAUCUCUCUUUCAAGGAGGCAG-CGGGGAUUCGA 58
chr-5.trna111-Glu-TTC    GCCCCCAUCGUCUAG-UGGUUCAGGACAUCUCUCUUUCAAGGAGGCAG-CGGGGAUUCGA 58
chr-3.trna156-Glu-TTC    GCCCCCAUCGUCUAG-UGGUUCAGGACAUCUCUCUUUCAAGGAGGCAG-CAGGGAUUCGA 58
chr-1.trna43-Glu-TTC     GCCCCCAUCGUCUAG-UGGUUUAGGACAUCUCUCUUUCAAGGAGGCAG-CGGGGAUUCGA 58
chr-2.trna228-Glu-TTC    GCCCCCAUCGUCUAG-UGGUUCAGGACAUCUCUCUUUCAAGGAGGCAG-CGAGGAUUCGA 58
chr-5.trna138-Glu-TTC    UCCAUUGUCGUCUAGUCCGGUUAGGAUA-CUGGCUUUCACCCAGGCGA-CCCGGGUUCAA 58
chr-1.trna150-Glu-TTC    UCCAUUGUCGUCUAGUCCGGUUAGGAUAUCUGGCUUUCACCCAGACGA-CCCGGGUUCAA 59
chr-1.trna211-Glu-TTC    UCCAUUGUCGUCUAGUCCGGUUAGGAUAUCUGGCUUUCACCCAGACGA-CCCGGGUUCAA 59
chr-10.trna89-Glu-TTC    UCCAUUGUCGUCUAGUCCGGUUAGGAUAUCUGGCUUUCACCCAGACGA-CCCGGGUUCAA 59
chr-10.trna76-Glu-TTC    UCCAUUGUCGUCUAGUCCGGUUAGGAUAUCUGGCUUUCACCCAGACGA-CCCGGGUUCAA 59
chr-2.trna114-Glu-TTC    UCCAUUGUCGUCUAGUCCGGUUAGGAUAUCUGGCUUUCACCCAGACGA-CCCGGGUUCAA 59
chr-6.trna66-Glu-TTC     UCCAUUGUCGUCUAGUCCGGUUAGGAUAUCUGGCUUUCACCCAGACGA-CCCGGGUUCAA 59
chr-7.trna2-Glu-TTC      UCCAUUGUCGUCUAGUCCGGUUAGGAUAUCUGGCUUUCACCCAGACGA-CCCGGGUUCAA 59
chr-9.trna82-Glu-TTC     UCCAUUGUCGUCUAGUCUGGUUAGGAUAUCUGGCUUUCACCCAGACGA-CCCGGGUUCAA 59
chr-3.trna219-Glu-TTC    UCCAUUGUCGUCUAGUCCGGUUAGGAUACCUAGCUUUCACCCAGGCGA-CUCGAAUUCAA 59
chr-2.trna13-Glu-TTC     UCCAUUGUCGUCCAGCCCGGUUAGGAUACCUGGCUUUCACCCAGGCGA-CCCGGGUUCAA 59
chr-3.trna175-Glu-TTC    UCCAUUGUCGUCCAGCCCGGUUAGGAUACCUGGCUUUCACCCAGGCGA-CCCGGGUUCAA 59
chr-4.trna79-Glu-TTC     UCCAUUGUCGUCCAGCCCGGUUAGGAUACCUGGCUUUCACCCAGGCGA-CCCGGGUUCAA 59
chr-3.trna119-Glu-TTC    UCCAUUGUCGUCCAGUCCGGUUAGGAUACCUAGCUUUCACCUAGGCGA-CUCGGAUUCAA 59
chr-9.trna23-Glu-CTC     UCCGUUGUAGUCUAG-GUGGUUAGGAUACUUGGCUCUCACCUGAGAGA-CCCGGGUUUAA 58
chr-5.trna19-Glu-CTC     UCCGUUGUAGUCUAG-GUGGUUAGGAUACUUGGCUCUCACCCGAGAGA-CCCGGGUUCAA 58
chr-7.trna84-Glu-CTC     UCCGUUGUAGUCUAG-GUGGUUAGGAUACUCGGCUCUCACCCGAGAGA-CCCGGGUUCAA 58
chr-4.trna68-Glu-CTC     UCCGUUGUAGUCUAG-UCGGUUAGGAUACUCGGCUCUCACCCGAGCGA-CCCGGGUUCAA 58
chr-1.trna73-Glu-CTC     UCCGUUGUAGUCUAG-UUGGUCAGGAUACUCGGCUCUCACCCGAGAGA-CCCGGGUUCAA 58
chr-3.trna203-Glu-CTC    UCCGUUGUAGUCUAG-UUGGUCAGGAUACUCGGCUCUCACCCGAGAGA-CCCGGGUUCGA 58
chr-7.trna117-Glu-CTC    UCCGUUGUAGUCUAG-UUGGUCAGGAUACUCGGCUCUCACCCGAGAGA-CCCGGGUUCGA 58
chr-2.trna90-Glu-CTC     UCCGUUGUAGUCUAG-CUGGUCAGGAUACUCGGCUCUCACCCGAGAGA-CCCGGGUUCGA 58
chr-5.trna31-Glu-CTC     UCCGUUGUAGUCUAG-CUGGUCAGGAUACUCGGCUCUCACCCGAGAGA-CCCGGGUUCGA 58
chr-8.trna49-Glu-CTC     UCCGUUGUAGUCUAG-CUGGUCAGGAUACUCGGCUCUCACCCGAGAGA-CCCGGGUUCGA 58
chr-7.trna16-Glu-CTC     UCCGUUGUGGUCUAG-CUGGUUAGGAUACUCGGCUCUCACCCGAGAGA-CCCGGGUUCGA 58
chr-2.trna219-Glu-CTC    UCCGUUGUAGUCUAG-CUGGUGAGGAUACUCGGCUCUCACCCGAGAGA-CCCGGGUUCGA 58
chr-5.trna59-Glu-CTC     UCCGUUGUAGUCUAG-CUAGUUAGGAUAUUCGGCUCUCACCUGAAAGA-CCCGAGUUCGA 58
chr-5.trna125-Glu-CTC    UCCGUUGUAGUCUAG-UUGGUCAGGAUAUUCGGCUCUCACCCGAAAGA-CCCGGGUUCAA 58
chr-5.trna124-Glu-CTC    UCCGUUGUAGUCUAG-UUGGUCAGGAUAUUCGGCUCUCACCCGAAAGA-CCCGGGUUCAA 58
chr-5.trna123-Glu-CTC    UCCGUUGUAGUCUAG-UUGGUCAGGAUAUUCGGCUCUCACCCGAAAGA-CCCGGGUUCAA 58
chr-1.trna189-Glu-CTC    UCUGUUGUAGUCUAG-CUGGUUAGGAUAUUCGGCUCUCACCCGAAAGA-CCCGGGUUCAA 58
chr-5.trna200-Glu-CTC    UCCGUUGUAGUCUAG-CUGGUUAGGAUAUUCGGCUCUCACCCGAAAGA-CCCGGGUUCGA 58
chr-1.trna85-Glu-CTC     UCCGUUGUAGUCUAG-CUGGUCAGGAUAUUCGGCUCUCACCCGAAAGA-CCCGGGUUCGA 58
chr-1.trna141-Glu-CTC    UCCGUUGUAGUCUAG-CUGGUCAGGAUAUUCGGCUCUCACCCGAAAGA-CCCGGGUUCGA 58
chr-6.trna91-Glu-CTC     UCCGUUGUAGUCUAG-CUGGUCAGGAUAUUCGGCUCUCACCCGAAAGA-CCCGGGUUCGA 58
chr-9.trna105-Glu-CTC    UCCGUUGUAGUCUAG-CUGGUCAGGAUAUUCGGCUCUCACCCGAAAGA-CCCGGGUUCGA 58
chr-1.trna188-Glu-CTC    UCCGUUGUAGUCUAG-CUGGUCAGGAUAUUCGGCUCUCACCCGAAAGA-CCCGGGUUCGA 58
chr-1.trna200-Glu-CTC    UCCGUUGUAGUCUAG-CUGGUCAGGAUAUUCGGCUCUCACCCGAAAGA-CCCGGGUUCGA 58
chr-9.trna106-Glu-CTC    UCCGUUGUAGUCUAG-CUGGUCAGGAUAUUCGGCUCUCACCCGAAAGA-CCCGGGUUCGA 58
chr-2.trna195-Glu-CTC    UCCGUUGUAGUCUAG-CUGGUCAGGAUAUUCGGCUCUCACCCGAAAGA-CCCGGGUUCGA 58
chr-8.trna88-Glu-CTC     UCCGUUGUAGUCUAG-CUGGUCAGGAUAUUCGGCUCUCACCCGAAAGA-CCCGGGUUCGA 58
chr-7.trna15-Glu-CTC     UCCGUUGUAGUCUAG-CUGGUCAGGAUAUUCGGCUCUCACCCGAAAGA-CCCGGGUUCGA 58
chr-9.trna40-Glu-CTC     UCCGUUGUAGUCUAG-CUGGUCAGGAUAUUCGGCUCUCACCCGAAAGA-CCCGGGUUCGA 58
chr-7.trna54-Glu-CTC     UCCGUUGUAGUCUAG-CUGGUCAGGAUAUUCGGCUCUCACCCGAAAGA-CCCGGGUUCGA 58
chr-3.trna216-Glu-CTC    UCCGUUGUAGUCUAG-CUGGUCAGGAUAUUCGGCUCUCACCCGAAAGA-CCCGGGUUCGA 58
chr-5.trna20-Glu-CTC     UCCGUUGUAGUCUAG-CUGGUCAGGAUAUUCGGCUCUCACCCGAAAGA-CCCGGGUUCGA 58
chr-8.trna183-Glu-CTC    UCCGUUGUAGUCUAG-CUGGUCAGGAUAUUCGGCUCUCACCCGAAAGA-CCCGGGUUCGA 58
chr-5.trna176-Glu-CTC    UUUGUUGUAGUCUAG-UUGGUCAGGAUACUCGGCUCUCACCCGAGAGA-CCUGGGUUCAA 58
                         .........10........20........30........40........50.........
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chr-5.trna174-Glu-CTC    GCCCCACGGUGG-GUG 73
chr-3.trna92-Glu-CTC     GCCUCAUGGUCU-GUG 69
chr-1.trna58-Glu-TTC     UUCUCGUAAGGG-AUA 72
chr-9.trna20-Glu-TTC     UUCCUGUAAGGG-AUA 72
chr-9.trna135-Glu-TTC    UUCCCGUAAGGG-AUA 72
chr-3.trna33-Glu-TTC     UUCCCGUAAGGG-AUA 72
chr-5.trna106-Glu-TTC    CUUCCCCUGGGG-GUA 73
chr-5.trna111-Glu-TTC    CUUCCCCUGGGG-GUA 73
chr-3.trna156-Glu-TTC    CUUCCCCUGGGG-GUA 73
chr-1.trna43-Glu-TTC     CUUCCCCUAGGG-GUA 73
chr-2.trna228-Glu-TTC    CUUCCCCUAGGGUGUA 74
chr-5.trna138-Glu-TTC    AUCUCGGCAAUG-GAA 73
chr-1.trna150-Glu-TTC    AUCCCGGCAAUG-GAA 74
chr-1.trna211-Glu-TTC    AUCCCGGCAAUG-GAA 74
chr-10.trna89-Glu-TTC    AUCCCGGCAAUG-GAA 74
chr-10.trna76-Glu-TTC    AUCCCGGCAAUG-GAA 74
chr-2.trna114-Glu-TTC    AUCCCGGCAAUG-GAA 74
chr-6.trna66-Glu-TTC     AUCCCGGCAAUG-GAA 74
chr-7.trna2-Glu-TTC      AUCCCGGCAAUG-GAA 74
chr-9.trna82-Glu-TTC     AUCCCGGCAAUG-GAA 74
chr-3.trna219-Glu-TTC    AUCUCGGCAAUG-GAA 74
chr-2.trna13-Glu-TTC     AUCCCGGCAAUG-GAA 74
chr-3.trna175-Glu-TTC    AUCCCGGCAAUG-GAA 74
chr-4.trna79-Glu-TTC     AUCCCGGCAAUG-GAA 74
chr-3.trna119-Glu-TTC    AUCCCGGCAAUG-GAA 74
chr-9.trna23-Glu-CTC     GUCCCGGCAAUG-GAA 73
chr-5.trna19-Glu-CTC     GUCCCGACAACG-GAA 73
chr-7.trna84-Glu-CTC     GUCCCGGCAACG-GAA 73
chr-4.trna68-Glu-CTC     AUCCCGGCAACG-GAA 73
chr-1.trna73-Glu-CTC     GUCCCGGCAACG-GAA 73
chr-3.trna203-Glu-CTC    GUCCCGGCAACG-GAA 73
chr-7.trna117-Glu-CTC    GUCCCGGCAACG-GAA 73
chr-2.trna90-Glu-CTC     GUCCCGGCAACG-GAA 73
chr-5.trna31-Glu-CTC     GUCCCGGCAACG-GAA 73
chr-8.trna49-Glu-CTC     GUCCCGGCAACG-GAA 73
chr-7.trna16-Glu-CTC     GUCCCGGCAACG-GAA 73
chr-2.trna219-Glu-CTC    GUCCCGGCAACG-GAA 73
chr-5.trna59-Glu-CTC     GUCCCGGUAACG-GAA 73
chr-5.trna125-Glu-CTC    GUCCCGGCAACG-GAA 73
chr-5.trna124-Glu-CTC    GUCCCGGCAACG-GAA 73
chr-5.trna123-Glu-CTC    GUCCCGGCAACG-GAA 73
chr-1.trna189-Glu-CTC    GUCCCGGCAACG-GAA 73
chr-5.trna200-Glu-CTC    GUCCCGGCAACG-GAA 73
chr-1.trna85-Glu-CTC     GUCCCGGCAACG-GAA 73
chr-1.trna141-Glu-CTC    GUCCCGGCAACG-GAA 73
chr-6.trna91-Glu-CTC     GUCCCGGCAACG-GAA 73
chr-9.trna105-Glu-CTC    GUCCCGGCAACG-GAA 73
chr-1.trna188-Glu-CTC    GUCCCGGCAACG-GAA 73
chr-1.trna200-Glu-CTC    GUCCCGGCAACG-GAA 73
chr-9.trna106-Glu-CTC    GUCCCGGCAACG-GAA 73
chr-2.trna195-Glu-CTC    GUCCCGGCAACG-GAA 73
chr-8.trna88-Glu-CTC     GUCCCGGCAACG-GAA 73
chr-7.trna15-Glu-CTC     GUCCCGGCAACG-GAA 73
chr-9.trna40-Glu-CTC     GUCCCGGCAACG-GAA 73
chr-7.trna54-Glu-CTC     GUCCCGGCAACG-GAA 73
chr-3.trna216-Glu-CTC    GUCCCGGCAACG-GAA 73
chr-5.trna20-Glu-CTC     GUCCCGGCAACG-GAA 73
chr-8.trna183-Glu-CTC    GUCCCGGCAACG-GAA 73
chr-5.trna176-Glu-CTC    GUCUCGGCAUCG-GAA 73
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